AMENDMENTS TO THE CLAIMS

Claims 1-11. (Canceled)

12. (Previously presented) A method of operating a compression ignition engine on an oxygenated diesel fuel composition comprising methanol, dimethyl ether and water, said method comprising the step of injecting the fuel into the combustion chamber of the engine and combusting the fuel with air, wherein the concentration of methanol is between 5 and 50% w/w, the concentration of dimethyl ether is between 30 and 68% w/w, and the concentration of water is between about 14 and 40% w/w, and wherein the air for combustion is preheated to a temperature of at least 60°C, said fuel composition being obtainable by a process comprising the step of converting methanol containing up to 20% w/w of water and up to 20% w/w of ethanol or higher alcohol in a catalytic dehydration reaction, the methanol being converted to dimethyl ether according to the reaction scheme:

$2\,CH_3OH \Leftrightarrow DME + water$

using a catalytic converter on board of a vehicle, wherein the dehydration temperature is between 200°C and 450°C and wherein the pressure is between 10 and 400 bar.

13. (Previously presented) The method of claim 12, wherein the combustion air is preheated to a temperature of at least 100°C.

14. (Previously presented) The method of claim 12, wherein the combustion air is preheated by exchange with exhaust gas.

15. (Previously presented) The method of claim 12, applied to vehicles, ships, trains or in stationary diesel engines for power and heat supply.

16. (New) The method of claim 12, wherein the concentration of dimethyl ether is between 30 and 60% w/w.